

AMENDMENTS TO THE DRAWINGS

Applicants are submitting herewith an annotated drawing sheet showing Figs. 1 and 3 cross-hatched for a plastic material.

Attachment: 1 Annotated Sheet

REMARKS

The original Office Action was mailed on December 12, 2007, but was restarted by the Examiner on December 18, 2007 in order to make a correction to the original Office Action. Thus, the Amendment is timely filed on March 18, 2008.

Claims 1-4 presently are pending in the application. Claim 1 has been amended in order to define the invention more clearly. Reconsideration and allowance of all claims are respectfully requested in view of the following remarks.

The Examiner has acknowledged the claim for foreign priority under 35 U.S.C. § 119, but indicates that none of the copies have been received from the International Bureau. Applicant has obtained a copy from the International Bureau website and is submitting the same herewith for the Examiner's review.

The Examiner has returned an initialed copy of the PTO/SB/08 Form, thereby indicating that she has considered the references listed thereon.

The Examiner has objected to the drawings under § 1.83(a) because the sectional figures must be properly cross-hatched to reflect the PET material of claim 2. The Examiner references the Steinke reference of record as an example. Accordingly, Applicant is submitting herewith an annotated drawing sheet showing Figs. 1 and 3 cross-hatched for a plastic material. Upon approval by the Examiner of the proposed drawing correction to Figs. 1 and 3, Applicant will provide a formalized replacement sheet.

Claims 1-4 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Steinke (U.S. Patent No. 6,065,624) cited by Applicants in view of Krishnakumar et al. (U.S. Patent No. 5,989,661), Young et al. (U.S. 4,054,219) and Eberle (U.S. Patent No. 4,993,566). For the following reasons, the Applicant respectfully traverses this rejection.

In the rejection under § 103(a), the Examiner maintains that Steinke teaches a container with a recessed bottom having a central projecting “pimple” on a longitudinal axis and a plurality of radial ribs extending between the pimple and the standing ring without extending into the standing ring. The Examiner alleges that the provision of a circular plateau on a central pimple for centering of a preform is known in the art of blow-molding as taught by Krishnakumar et al. The Examiner further alleges that to have provided a container of Steinke with such a plateau for centering in the mold would have been obvious in view of Krishnakumar et al.

Further, the Examiner maintains that the formation of dihedral-shaped ribs is also known as taught by Young et al. The Examiner concludes that to have provided the ribs with the dihedral-shape would have been obvious in view of Young et al. Finally, the Examiner alleges that to have made the ribs without discontinuity for greater stretching in the recess would have been obvious in view of the teaching of Eberle.

While Steinke ‘624 discloses a container having a recessed bottom with a central projecting portion on a longitudinal axis of the container, and a plurality of radial ribs extending between the central projecting portion and the standing ring of the container bottom without extending into the standing ring, any other similarity ends there.

More specifically, the recessed bottom in Steinke ‘624 is a substantially “standard” recessed bottom, i.e., a bottom in which the recess is not very high. In contrast, a container consistent with the present invention relates to bottoms having a very high recess or so-called “champagne bottoms”. As discussed in the beginning of the present application, champagne bottoms are very interesting for containers to be filled with carbonated liquids. However, they have the disadvantage in requiring a bottom wall which has a thickness greater than the thickness of the sidewall of the body of the container. Accordingly, an aspect of the present invention is to

provide an improved “champagne bottom” which allows a reduced thickness in the bottom wall and a lower cost due to a reduction in the amount of thermoplastic material used, while at the same time providing an increased bottom rigidity and flatness of the standing ring.

In view of the foregoing, Steinke ‘624 quite clearly fails to teach or suggest such a container as provided by the present invention.

Moreover, while Fig. 6 of Steinke ‘624 discloses a central projection or pimple, the pimple or projection quite clearly projects upwardly, inside the container. In contradistinction, the central pimple of the container according to the present invention projects downwardly, outside the container.

The secondary references fail to make up for the deficiencies of Steinke ‘624. More specifically, Krishnakumar et al. ‘661 discloses a container bottom provided with a central pimple projecting downwardly and being shaped as a plateau. However, the bottom has no radial ribs. Moreover, the structure of the projecting pimple is not a free choice of one having ordinary skill in the art, but rather depends on the type of bottom. The “standard” bottom as in Steinke ‘624 is currently provided with a pimple projecting upwardly inside the container, while a “champagne bottom” as in the present invention requires a pimple projecting downwardly outside the container so as to stabilize the shape of the bottom in the course of the cooling step when the container is extracted out of the mold after the blowing step.

Consequently, to provide the container bottom of Steinke ‘624 with a central pimple projecting downwardly as taught by Krishnakumar et al. ‘661 would make no technical sense to one having ordinary skill in the art.

Young shows a container bottom which is provided with four cross-shaped grooves, the radial outer ends of which extend through the standing ring of the bottom. Each quarter between

the grooves is dihedral-shaped, but only one dihedral is provided in each quarter, such that there are only four dihedrals. Moreover, when considering the cross-section of Figs. 5 and 6 of Young, it is readily apparent that each valley (for example, the connection of panel 38 with groove 58, in Fig. 5) does not blend gradually into a continuous rounded form of the standing ring, but rather each valley connects with the standing ring with a step 38a. Likewise, each crest (for example, 52 in Fig. 6) does not blend gradually into a rounded form of the standing ring, but rather each crest connects with the standing ring by means of a step (not referenced).

Finally, Eberle teaches a container bottom provided with a plurality of ribs. However, the ribs are rounded in cross-section (see Fig. 4) and are not dihedral-shaped. Rather, the ribs are curved into spirals and do not extend radially, and overall the ribs are not distributed around the bottom without discontinuity. As is clearly apparent in Fig. 4 of Eberle, each rib is provided with flat regions on both sides thereof. Consequently, if rotating around the central disk 24, you encounter alternately one rib, then one flat region, then one rib, then one flat region, and so on.

Thus, in order to teach or suggest the arrangement according to the present invention, each rib in Eberle would have to be followed by an inverted rib in the place of a flat region, and so on. In other words, the bottom would be provided with juxtaposed ribs alternately protruding outwardly and inwardly from the container and this is simply not the case in Eberle.

For this reason, Eberle fails to teach or even remotely suggest dihedral-shaped ribs following one another without discontinuity.

In conclusion, the Examiner's applied combination of four different references still fails to teach or suggest a plurality of dihedral-shaped ribs, nor that the dihedral-shaped ribs follow one another without discontinuity, nor that the dihedral-shaped ribs extend with a curved longitudinal profile in such a manner that valley bottoms and crests of the ribs have respective

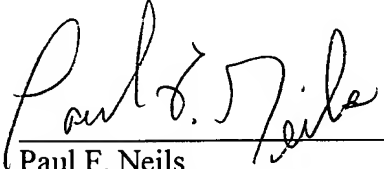
outer end regions adjacent to the standing ring which have respective curvatures blending gradually into a continuous rounded form of the standing ring.

Claim 1 has been amended in order to clarify the present invention in a manner commensurate with the above comments. More specifically, all of the features recited in claim 1 when taken together define a container bottom which is improved in a manner so as to provide a reduced thickness of the bottom wall and consequently a reduced manufacturing cost, as well as an improved planar annular bearing region.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

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